



E6000™ Converged Edge Router (CER) Release 1.0

Specifications

Installation Environment

RF Interfaces	External F connector for downstream, external MCX connector for upstream
Network-side Interfaces	10 Gigabit Ethernet (SFP+) auto-baud, plus 1 GigE ports for management
Power	Dual DC voltage mains: -48 VDC (-40 to -72 VDC); Optional AC power configuration
Power Consumption (note 1)	Nominal: 3,500 W Chassis Capacity: 6,400 W at -40 VDC Note 1 – Nominal power consumption for Rel. 1.0 redundant full-fill chassis with 1:1 US-SG to DS-SG ratio.

RF Downstream

Frequency Range (MHz)	57 to 999 (DOCSIS® 3.0); 90 to 1002 (EuroDOCSIS™ 3.0)
Modulation Schemes	64 QAM, 256 QAM (256 QAM only in Rel. 1.0)
Data Rate (Mbps) (Max.)	Up to 55.62 per channel
RF Output Level (dBmV)	41 to 60

RF Upstream

Frequency Range (MHz)	5 to 85 (5 to 65 with Software Release 1.0)
Modulation Schemes	QPSK, 8 QAM, 16 QAM, 32 QAM, 64 QAM (No 8 QAM Support in Software Release 1.0)
Data Rate (Mbps) (Max.)	Up to 30.72
Receive Input Level (dBmV)	-16 to 29

Physical

Operating Temperature:	
Short Term °F (°C)	+23 to +131 (-5 to +55)
Long Term °F (°C)	+41 to +104 (+5 to +40)
Storage Temperature °F (°C)	-40 to +158 (-40 to +70)
Operating Humidity (Min.-Max.)	5 to 85% (Non condensing)
Dimensions (H x W x D) in. (cm)	28 x 17.64 x 32.5 (71.1 x 44.8 x 82.6)
Weight lbs. (kg)	116 (52.2)

Software Release 1.0 Features (Partial List)

Downstream CAM (DCAM) (128D Annex A or B)	Policy-Based Routing
8 RF (F Connectors) per Physical Interface Card (PIC)	DOCSIS 3.0 24 Channel Bonding (Downstream)
128 Channels	DOCSIS 3.0 Four Channel Bonding (Upstream)
Max 16 Channels per RF connector	IS-IS, BGPv4
Up to 7+1 RF Sparing in Rel. 1.0	PacketCable™ Multimedia Support
Upstream CAM (UCAM)	Dynamic Cable Modem Load Balancing
Flexible Mapping of Upstream Channels to RF Connectors	SII Lawful Intercept (RFC 3924)
Up to 12 Upstream Channels per RF Connector	802.1Q VLAN tagging
24 RF (MCX) Connectors per Physical Interface Card (PIC)	Extended ACLs & Named ACLs
Up to 5+1 RF Sparing in Rel. 1.0	Secure Shell v2 (SSHv2)
IPv6 Features	DOCSIS Ping
Cable Modem Management	DHCP Relay Agent (Option 82)
Dual-Stack CPE	DNS Client
IS-IS Routing with Multi-topology support	TFTP Enforce and Dynamic MIC
Cable Source Verify with DHCP Lease Query	BSoD L2 VPN
Route Injection (RI) for DHCPv6 Prefix Delegation	BPI+ Enforce
OSPFv3	IPDR/SP
Prefix Stability	
DOCSIS 3.0 Multicast IP Video Support (via IGMPv3 Control)	

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Technical Specification

ARRIS E6000 CER Release 1.0 Technical Specification

Specifications Continued...

Regulatory

Designed to NEBS Level 3 Requirements
Safety: UL® 60950, CSA C22.2 No. 950, IEC60950
EMC: GR-1089-CORE (ESD, Grounding Electrical Safety)
FCC Part 15 Class A, EN300 386-2 (CISPR 22, Class A)
Environmental: GR-63-CORE, ETS 300 019

Ordering Information

801025	E6000 CER 128 DS DCAM Kit (Active) - 1 DCAM, Active DCAM PIC, and 128 DOCSIS DS Licenses
801021	E6000 CER 128 DS DCAM Kit (Spare) - 1 DCAM, Spare DCAM PIC, and 128 DOCSIS DS Licenses
802117	E6000 CER 128 DS DCAM Kit (Active) - 1 DCAM, Active DCAM PIC, and 128 EuroDOCSIS DS Licenses
802118	E6000 CER 128 DS DCAM Kit (Spare) - 1 DCAM, Spare DCAM PIC, and 128 EuroDOCSIS DS Licenses
799008	E6000 CER 48 US UCAM Kit (Active) - 1 UCAM, Active UCAM PIC, and 48 DOCSIS US Licenses
801026	E6000 CER 48 US UCAM Kit (Spare) - 1 UCAM, Spare UCAM PIC, and 48 DOCSIS US Licenses
801023	E6000 CER Duplex Chassis Kit - Two RSMs, No CAMs, Release 1.x
801022	E6000 CER Simplex Chassis Kit - One RSM, No CAMs, Release 1.x
799012	E6000 CER Router System Module Kit - 1 RSM and RSM PIC
796834	E6000 CER Chassis Assembly (Chassis + FRUs)
796838	E6000 CER Chassis Control Module (CCM)
796839	E6000 CER Fan Tray
796840	E6000 CER Front Air Filter Tray
796841	E6000 CER Rear Air Filter Tray
801058	E6000 CER Front Air Filter
801059	E6000 CER Rear Air Filter
796844	E6000 CER Power Entry Module
796848	E6000 CER DPIC - Physical Interface Card (Active) for DCAM (796848)
796851	E6000 CER DPIC - Physical Interface Card (Spare) for DCAM (796851)
796849	E6000 CER UPIC - Physical Interface Card (Active) for UCAM (796849)
796850	E6000 CER UPIC - Physical Interface Card (Spare) for UCAM (796850)
796836	E6000 CER Router System Module (796836)
796847	E6000 CER RPIC - Physical Interface Card for RSM (796847)
801038	E6000 CER Front Filler Panel
801039	E6000 CER Rear Filler Panel
801062	E6000 CER 48 US License Bundle

Specifications are subject to change without notice.

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